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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,241	01/12/2001	Katsuhisa Tanaka	10517/76	7842

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KENYON & KENYON
1500 K STREET, N.W., SUITE 700
WASHINGTON, DC 20005

EXAMINER

LORENZO, JERRY A

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 03/29/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,241

Applicant(s)

TANAKA, KATSUHISA

Examiner

Jerry A. Lorengo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

(1)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

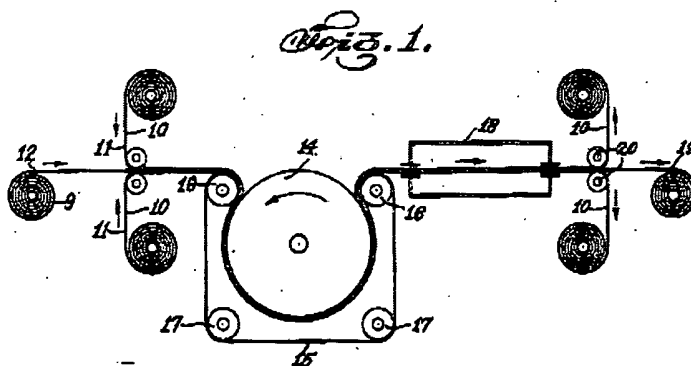
Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,485,725 to Francis, Jr.

Regarding applicant claim 1, Francis, Jr. discloses an apparatus capable of manufacturing a web 12 having a coating 11 deposited on both sides thereon comprising:

(1) A heater 14,15 capable of preheating a web 12 (Figure 1; column 5, lines 6-7);

(2) a hot press 14,15 capable of forming a web 12 having a coating 11, as per applicant claim 6, deposited on both sides thereof by heating and pressing transfer substrates (backing sheets) 10 having a transferable coating 11 thereon to either side of a web 12 (Figure 1; column 5, lines 5-13); and

(3) a separating machine (stripping rolls) 20 capable of separating the transfer substrates 10 from the coated web 12 (Figure 1; column 5, lines 18-21). The apparatus of Francis, Jr. is illustrated below:



As per applicant claims 2 and 4, the apparatus of Francis, Jr. includes a cooling machine (cooling chamber) 18 capable of cooling the laminate comprising the web 12 in contact with the backing sheets 10 having the transferable coating thereon 11 (Figure 1; column 5, lines 14-18).

As per applicant claim 5, the apparatus of Francis, Jr. utilizes an integrated heater and hot press 14,15 (Figure 1; column 5, lines 6-13).

(2)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,485,725 to Francis, Jr. in view of "Pressure-Sensitive Adhesives for Tapes and Labels" by Temin.

Francis, Jr., as set forth in section (1), above, discloses an apparatus comprising a heater, hot press, separating machine and cooling machine. Although he discloses, as illustrated above, that the separating machine (stripping rolls) 20 separate the backing sheets 10 from the web 12 with coating layers 11 thereon at an angle of approximately 90°, he does not specifically disclose, as per applicant claim 3, that the stripping angle is substantially 180°.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the stripping angle disclosed by Francis, Jr. et al. motivated by the fact that Temin discloses that angle of peel is intimately related to the force of pulling, the rate of pulling, the roughness and the surface energy of the surface, the pressure with which the films are

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pressed, the time of dwell before peeling is started and the mode of cohesive failure (page 657, 1st full paragraph).

(3)

Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,485,725 to Francis, Jr. in view of JP 10-064574 to Kazuhiko.

Regarding applicant claim 7, Francis, Jr. discloses a method for manufacturing a web 12 having a polymer film 11 applied to both surfaces thereof comprising the steps of (Figure 1; column 5, lines 1-20):

(1) Preheating the web 12 by way of the integrated heater and hot press means 14,15;

(2) contacting the web 12 with the transfer sheets, each comprising a backing sheet 10 and transferable polymer film 11 thereon;

(3) forming a laminate comprising the web 12 and bonded polymer layers 11 (joined member) by heating the transfer sheets 10,11 and the web 12 via the integrated heater and hot press 14,15; and

(4) separating the backing sheet 10 from the web 12 with the polymer films 11 on each surface thereof by way of stripping rolls 20.

As per applicant claim 10, Francis, Jr. discloses that the web 12 with the transfer sheets 10,11 thereon are cooled via cooling chamber 18 prior to separating via stripping rolls 20 (Figure 1; column 5, lines 14-18).

Although Francis, Jr. discloses a method for applying a polymer film 11 via a transfer sheet 10,11 to a web 12, he does not specifically disclose, as per applicant claim 7, that the web 12 is a polymer film and the coating 11 comprises a catalyst and a solid polymer film.

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the method of Francis, Jr. in forming a polymer film with a catalyst deposited thereon motivated by the fact that Kazuhiko et al. discloses that such laminates can be formed utilizing transfer lamination methods, such as that disclosed by Francis, Jr. (abstract; Figure 3).

(4)

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as combined in section (3), above, in further view of "Pressure-Sensitive Adhesives for Tapes and Labels" by Temin.

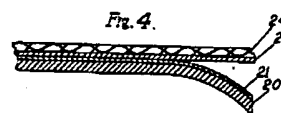
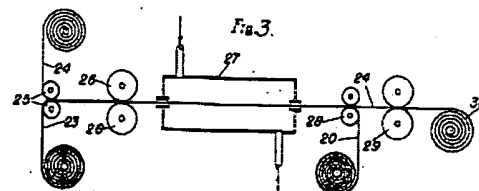
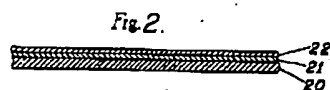
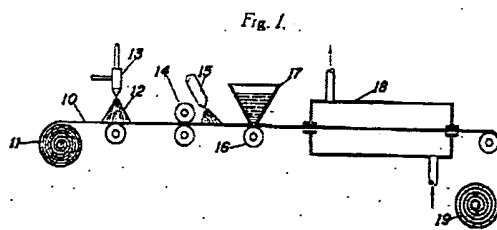
The references as combined in section (3), above, disclose a method for the formation of a polymer film with a catalyst deposited thereon. Although both Francis, Jr. and Kazuhiko disclose that the backing sheets are separated from the substrate with coating layers thereon at an angle of approximately 90° (Francis, Jr., at Figure 1; Kazuhiko at Figures 3 and 4), they do not specifically disclose, as per applicant claim 9, that the stripping angle is substantially 180°.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the stripping angle disclosed by the references as combined in section (3), above, motivated by the fact that Temin discloses that angle of peel is intimately related to the force of pulling, the rate of pulling, the roughness and the surface energy of the surface, the pressure with which the films are pressed, the time of dwell before peeling is started and the mode of cohesive failure (page 657, 1st full paragraph).

(5)

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as combined in section (3), above, in further view of U.S. Patent No. 2,556,078 to Francis, Jr. (hereinafter "Francis '078").

Although neither Francis, Jr. nor Kazuhiko specifically disclose that the catalyst transfer sheet is cooled prior to contact with the solid polymer film, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the coating on the transfer sheets prior to contact with the polymer film, such as by cooling, motivated by the fact that Francis '078, also drawn to methods for the transfer of a coating 22 from a transfer sheet 20,21 to a web substrate 24, discloses that during the manufacture of the transfer sheet 20,21,22, the transfer sheet is cooled prior to use in order to solidify the coating 22 applied to the transfer sheet backing 20,21 (Figures 1-4; column 8, lines 4-16; column 8, lines 59-75; column 9, lines 1-21). The method of Francis '078 is illustrated below:



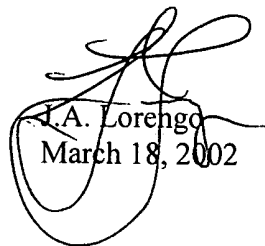
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(6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A. Lorengo whose telephone number is (703) 306-9172. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



J.A. Lorengo
March 18, 2002